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CaseID: 6288

Date: Wednesday December 23, 2015
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Final Comment

In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)

Attention: ACWA Power SolarReserve Redstone Solar Thermal Power Plant
C/O Prabashen Govender
Office XX07001
90 Grayston Drive
Simon's Town 2196

Proposed construction of two 132kV power lines and associated infrastructure from the ACWA Power SolarReserve Redstone Solar Thermal Power Plant to the Olien MTS near Lime Acres, Northern Cape Province

Hutten, M. July 2014. Proposed Construction Of Two 132kv Power Lines And Switchyards To Connect The Redstone Solar Thermal Energy Plant To The Olien Substation In The Ngcawu District Municipality In The Northern Cape Province Option 1: Redstone Solar Thermal Energy Plant to Olien Substation.

Almond, J. November 2015. PALAEONTOLOGICAL HERITAGE BASIC ASSESSMENT: COMBINED DESKTOP & FIELD-BASED STUDY Proposed 132 kV power lines between the ACWA Power SolarReserve Redstone Solar Thermal Energy Plant Site and Olien Main Transmission Substation near Lime Acres, Northern Cape Province.

ACWA Power Solar Reserve Redstone Solar Thermal Power Plant proposes the construction of two 132Kv power lines and associated infrastructure from the ACWA Power Solar Reserve Redstone Solar Thermal Power Plant Project site to the Olien Main Transmission Substation (MTS) near Lime Acres, Northern Cape Province. Four route alternatives have been identified for the proposed 132Kv power line:

- Alternative 1 – approximately 35km
- Alternative 2 – approximately 34km
- Alternative 3 – approximately 36km
- Alternative 4 – approximately 36km

A Phase 1 Archaeological Impact Assessment was undertaken for this project, however, no palaeontological assessment was done. The archaeologist investigated the area over four days. The following heritage resources were identified:

- HR01 - The dilapidated remains of the abandoned Silverstreams Railway Station. No impact is



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envisaged on the site.

- HR02 - The dilapidated remains located across the railway station. It is recommended that the line be realigned to avoid impact on the site.
- HR04 - The remains of a stone-walled kraal. The author indicated that impacted is not likely on the site.
- HR05 - The remains of an old mine shaft. No impact is envisaged on the site.
- HMR6 - Possible Middle Stone Age (MSA) artefact scatter
- HRM7 - Stone Age scatter with Early Stone Age (ESA) hand axe
- ACO03 - ESA artefact scatter
- PGS09 - An informal cemetery with five graves. The graves date from 1913 and is indicated that it is associated with a Farmstead. It is not clear if HR02 is the farmstead that is referred to in this case.
- HRM002 - An informal cemetery of approximately 70 graves. It is noted that the cemetery has recently been fenced by the PPC Mine.
- HR06 - An informal cemetery comprising of five graves. Alternative 3 runs in close proximity to the cemetery, although impact is not expected.

The palaeontological assessment concludes that, on the basis of both desktop analysis and fieldwork within the broader power line study area, the palaeontological sensitivity of all power line corridors under consideration is assessed as low. This also applies to the area to the north of Lime Acres where stromatolites occur within the underlying bedrock but are rarely well-exposed at surface and are therefore unlikely to be significantly impacted by the proposed transmission lines. The Makganyene Formation outcrop area in the north-western corner of the remainder of the Farm Nr. 469, close to the R385 tar road, is of considerable scientific interest as an accessible part of the limited rock record for an Early Proterozoic glacial event. However, fossil stromatolites do not occur within the succession here and significant palaeontological impacts are therefore not anticipated. Potential impacts on local palaeontological heritage are assessed for all power line corridor options as being of low negative significance. There is no preference on palaeontological heritage grounds for any particular power line corridor, or for either of the two main options for connecting the ACWA Power SolarReserve Redstone Thermal Energy Plant to the national grid.

The author states that no further specialist palaeontological studies, monitoring or mitigation are recommended for the proposed 132 kV power line projects near Postmasburg, including the associated substation and switchyard infrastructural developments.

It is recommended that:

The Environmental Control Officer (ECO) responsible for the electrical infrastructure developments should be

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aware of the possibility of important fossils being present or unearthed on site and should regularly monitor all substantial excavations into superficial sediments as well as fresh sedimentary bedrock for fossil remains.

In the case of any significant fossil finds made during construction, these should be safeguarded - preferably in situ - and reported by the ECO as soon as possible to the relevant heritage management authority.

These recommendations should be incorporated into the Environmental Management Programme (EMPr) for the electrical infrastructure projects associated with the ACWA Power SolarReserve Redstone Solar Thermal Power Plant.

Final Comment:

1. The Stone Age artefact scatters identified during the assessment is of low significance and no further assessments are required for these sites.
2. No further palaeontological assessment is required and SAHRA does not object to the proposed development in terms of possible impact on palaeontological heritage resources, provided the recommendations in the PIA are adhered to.
3. The informal cemeteries must be retained *in situ*. For this purpose, a proper fence must be built around them including entry gates to allow visits from relatives and family friends. The fence must be placed 2 metres away from the perimeter of the graves. No development is allowed within 15 metres from the fence line surrounding the graves. Alternatively, The SAHRA Burial Grounds and Graves Unit requires that if the area where the burials are located fall within the development footprint, then provisions stipulated in section 36 of the National Heritage Resources Act (Act No. 25 of 1999) are applicable, and relocation of these might proceed provided that a public consultation process is followed.
4. Decisions in terms of Built Environment must be referred to the Northern Cape Provincial Heritage Authority (Mr Ratha Timothy, ratha.timothy@gmail.com)

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

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Phillip Hine
SAHRA Head Archaeologist (Acting)
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/173982>
(DEA, Ref: 14/12/16/3/3/1/1201)

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.